

## **REMARKS**

Claims 1-20 are currently pending in the application. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

### ***Information Disclosure Statement***

The Information Disclosure Statement (IDS) submitted on July 31, 2003, was only partially considered because it did not contain a concise explanation of the relevance of each patent listed that is not in the English language.

Applicants submit herewith English-language abstracts, claims and/or family members of the documents that were not considered in the IDS submitted July 31, 2003. Applicants respectfully request the Examiner consider these documents and indicate the same by initialing the enclosed PTO-1449 Form.

### ***35 U.S.C. §102 Rejection***

Claims 1-20 were rejected under 35 U.S.C. §102(b) for being anticipated by U. S. Patent No. 6,107,588 issued to De Leo et al. ("De Leo"). Claims 1-20 were rejected under 35 U.S.C. §102(b) for being anticipated by U. S. Patent No. 6,274,836 issued to Walach ("Walach").<sup>1</sup> These rejections are respectfully traversed.

To anticipate a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. MPEP

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<sup>1</sup> Applicants note that the patent numbers of the De Leo et al. and Walach references are not listed in the Detailed Action. However, in a telephone conversation with Applicants' representative on May 1, 2006, Examiner Miller confirmed that De Leo et al. refers to U.S. Pat. No. 6,107,588 and Walach refers to U.S. Pat. No. 6,274,836.

§2131. Applicants submit that the references supplied by the Examiner do not show each and every feature of the claimed invention.

The instant invention generally relates to a sequencing system and method of use and, more particularly, to a sequencing system using multiple induction points to sequence products and a method of use. Independent claim 1 recites:

1. A system for sequencing products, comprising:
  - a plurality of input feeding devices each randomly receiving products from a stream of product;
  - a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the product to a plurality of output bins of the plurality of output groups; and
  - a control having a first mode of operation and a second mode of operation for the first pass phase and the second pass phase, respectively, wherein
    - in the first mode, the control allows all input feeding devices of the plurality of input feeding devices complete access to all output groups of the plurality of output groups during the first pass phase, and
    - in the second mode, the control constrains placement of the products to output groups assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase.

Independent claim 13 recites:

13. A system for sequencing products, comprising:
  - a plurality of input feeding devices each randomly receiving products from a stream of product;
  - a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, the plurality of input feeding devices feeding the products to output bins of the plurality of output groups; and
  - a control allowing all input feeding devices of the plurality of input feeding devices complete access to all

output groups of the plurality of output groups during the first pass phase and assigning contiguous output bins to predetermined output groups of the plurality of output groups and associating each of the predetermined output groups with respective input feeding devices such that the predetermined output groups remain constant between the first pass phase and the second pass phase.

Independent claim 17 recites:

17. A method of sequencing product, comprising the steps of:

providing a plurality of product from a stream of product to any of a plurality of input devices;

feeding each of the plurality of product, in a first pass phase, to an assigned group of output bins of a plurality of output groups based on a code associated with the each of the product, the plurality of product being fed by the plurality of input devices; and

assigning each of the plurality of input devices to each of the assigned group of output bins.

The applied references do not show these features.

De Leo

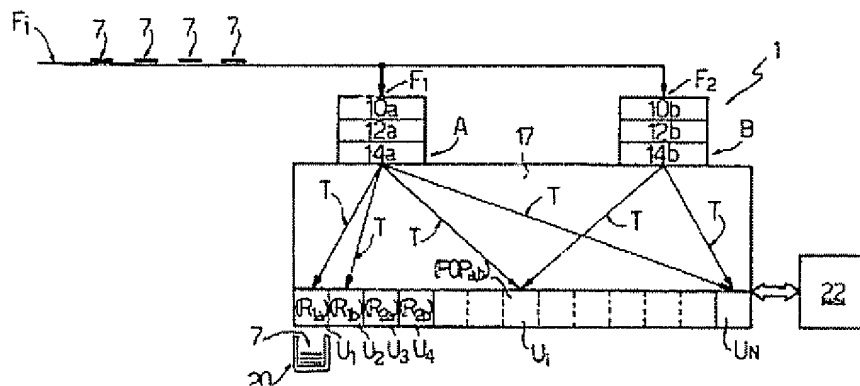
The Examiner asserts that De Leo discloses the features of claims 1-20 in "col. 3, lines 10+; col. 5, lines 10+". Applicants respectfully disagree.

De Leo discloses a method of sorting postal objects. In a first pass, a stream  $F_i$  of randomly ordered postal objects 7 is fed to first and second input devices A, B (Fig. 1a; col. 2, lines 25-49). Based upon a portion of a code associated with each object 7, a controller 22 directs the objects to any one of a plurality of output bins  $U_i$ . Each bin  $U_i$  may correspond to a delivery address  $R_i$  along a postal route P (Figs. 1a and 3). After

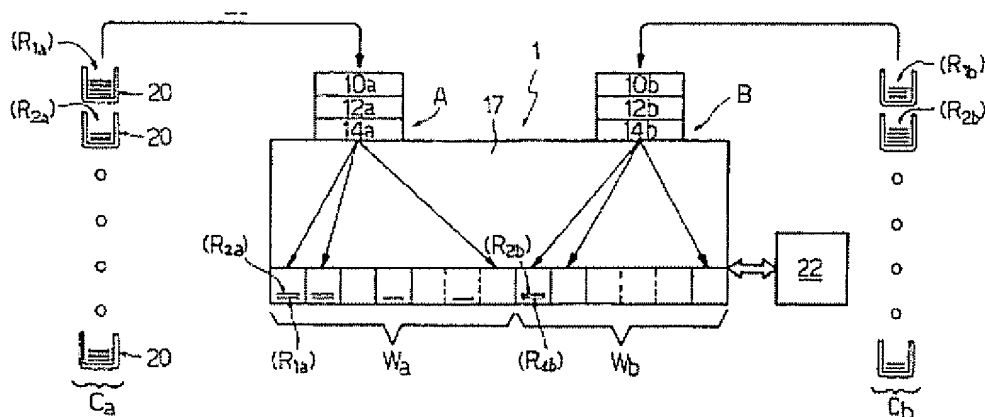
the first pass, a container 20 is removed from each bin  $U_i$  in a specified order to create collections  $C_a$  and  $C_b$  (Fig. 1a; col. 4, lines 30-67). However, the collections  $C_a$  and  $C_b$  are not associated with any specific group of output bins; instead the collections  $C_a$  and  $C_b$  are a collection of containers taken from each of the bins. Subsequently, new, empty containers 20 are fitted into each bin  $U_i$ . In the second pass, the postal objects of collection  $C_a$  are fed to first input device A, and are directed towards a first subset  $W_a$  of output bins (Fig. 1b; col. 5, lines 10-31). Also, in the second pass, the postal objects of collection  $C_b$  are fed to second input device B, and are directed towards a second subset  $W_b$  of output bins. In this manner, the postal objects are disposed in order by delivery address.

Contrary to the Examiner's assertion, however, De Leo does not disclose all of the features of claim 1. De Leo does not disclose a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, wherein the plurality of input feeding devices feed the product to a plurality of output bins of the plurality of output groups, as recited in claim 1. As previously discussed, there is no groupings of the output bins  $U_i$  in the first pass.

Moreover, De Leo does not disclose the control, in the second mode, which constrains placement of the products to output groups assigned in the first pass phase such that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass phase, as recited in claim 1. As discussed, and shown in reproduced Fig. 1a, below, De Leo does not even disclose a plurality of output groups during the first pass phase.



As shown in Fig. 1b, reproduced below, De Leo only discloses output groups  $W_a$ ,  $W_b$  of output bins with respect to the second pass phase.



Because De Leo does not disclose output groups associated with the first pass phase, it is impossible for De Leo to disclose that the control constrains placement of the products to output groups assigned in the first phase, as recited in claim 1. Moreover, because De Leo does not disclose output groups associated with the first pass phase, it is impossible for De Leo to disclose that the groupings of the products to the assigned output groups remain constant between the first pass phase and the second pass

phase. In fact, as is clearly shown between Figs. 1a and 1b, the containers in the first pass **do not** remain within any of the same groupings.

Even assuming, *arguendo*, that De Leo does disclose output groups during the first pass phase, which Applicants do not concede, then Applicants submit that the groupings of the products to the assigned output groups does not remain constant between the first pass phase and the second pass phase. This, again, is clearly shown by the comparison of Figs. 1a and 1b. Thus, there is simply nothing in De Leo to suggest output groups that remain constant between the first pass phase and the second pass phase. Therefore, De Leo does not disclose each and every element of claim 1, and does not anticipate claims 1-12.

Further contrary to the Examiner's assertions, De Leo does not disclose all of the features of claim 13. As discussed above, De Leo does not disclose output groups associated with the first pass phase. Rather, De Leo only discloses output groups  $W_a$ ,  $W_b$  of output bins during the second pass phase (Fig. 1b). Thus, it is impossible for De Leo to disclose a plurality of output groups corresponding to the plurality of input feeding devices during a first pass phase and a second pass phase, as recited in claim 13. Furthermore, because De Leo does not disclose any output groups associated with the first pass phase, it is impossible for De Leo to disclose that the output groups remain constant between the first pass phase and the second pass phase.

In any event, even assuming, *arguendo*, that De Leo does disclose output groups during the first pass phase, which Applicants do not concede, De Leo does not disclose assigning contiguous output bins to predetermined output groups of the plurality of output groups such that the predetermined output groups remain constant between the

first pass phase and the second pass phase, as recited in claim 13. De Leo simply does not disclose groups of contiguous output bins that remain constant between the first pass phase and the second pass phase. De Leo, instead, shows that product is fed to different output bins from the first pass to the second pass, contrary to the claimed invention. Therefore, De Leo does not disclose each and every element of claim 13, and does not anticipate claims 13-16.

Even further contrary to the Examiner's assertions, De Leo does not disclose all of the features of claim 17. As discussed above, De Leo does not disclose output groups associated with the first pass phase. Rather, De Leo only discloses output groups  $W_a$ ,  $W_b$  of output bins during the second pass phase (Fig. 1b). Thus, it is impossible for De Leo to disclose feeding each of the plurality of products, in a first pass phase, to an assigned group of output bins of a plurality of output groups, as recited in claim 17. Furthermore, De Leo does not disclose assigning each of the plurality of input devices to each of the assigned group of output bins. Therefore, De Leo does not disclose each and every element of claim 17, and does not anticipate claims 17-20.

### Walach

The Examiner asserts that Walach discloses the features of claims 1-20 in "col. 3, lines 46+; col. 4, lines 10+; col. 5, lines 38+". Applicants respectfully disagree.

Walach discloses a method and system for object sorting. The system comprises a multi-bin article sorter preferably comprising a plurality of P input bins and a plurality of N output bins (col. 5, lines 37-43). In a first pass, the articles are sorted into N output groups of articles being placed by the sorter in each of the N output bins

thereof. After the first pass, the N output groups are grouped into P input groups. The P input groups are resorted by placing each of the P input groups into a corresponding one of the P input bins. The sorter sorts the P input groups into N new output groups, each of the N new output groups being associated with and fed by exactly one of the P input bins (col. 5, lines 47-63). Walach discloses that, before the first pass, the articles are divided approximately equally between the two input bins (col. 7, lines 8-9).

Contrary to the Examiner's assertions, Walach does not disclose all of the features of the claimed invention. Particularly, Walach does not disclose a plurality of input feeding devices each randomly receiving products from a stream of product, as recited in claims 1 and 13. Walach simply does not disclose a stream of product. Moreover, by definition, if the product is equally distributed, they cannot be randomly assigned to the input feeding devices. Moreover, Walach does not disclose that the input bins P randomly receive products from anything, much less from a stream of product. Instead, Walach merely discloses input bins P and a sorter, and that the articles are divided approximately equally between the input bins. This does not, however, constitute randomly receiving products from a stream of product. Therefore, Walach does not disclose each and every element of claims 1 and 13, and does not anticipate claims 1-16.

Moreover, Walach does not disclose all of the features of claim 17. Specifically, Walach does not disclose providing a plurality of product from a stream of product to any of a plurality of input devices. As discussed above, Walach merely discloses input bins P and a sorter, and that the articles are divided approximately equally between the input bins. Walach does not, however, disclose a stream of product. Moreover, Walach



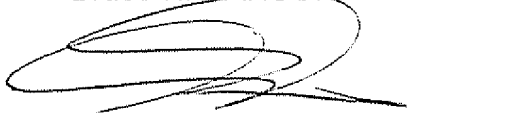
does not disclose that products from a stream of product can be provided to any of a plurality of input devices. Therefore, Walach does not disclose each and every element of claim 17, and does not anticipate claims 17-20.

Accordingly, Applicants respectfully request that the rejection over claims 1-20 be withdrawn.

### CONCLUSION

In view of the foregoing remarks, Applicants submit that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicants hereby make a written conditional petition for extension of time, if required. Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 19-0089.

Respectfully submitted,  
Bruce H. HANSON

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', is written over a horizontal line.

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